BioNanoScience 2016 vol.6 N4, pages 352-354

NMR Study of Conformational Structure of Fluvastatin and Its Complex with Dodecylphosphocholine Micelles

Galiullina L., Aganova O., Latfullin I., Musabirova G., Aganov A., Klochkov V.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2016, Springer Science+Business Media New York.Fluvastatin is a competitive inhibitor of 3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase. It lowers the overall blood cholesterol level, which is responsible for coronary artery diseases. Conformational features of fluvastatin in water solution were determined. NMR experiments showed that fluvastatin form molecular complex with model cell membrane. It intercalates into membrane surface by its aromatic part. Intermolecular distances between dodecylphosphocholine micelles and fluvastatin nuclei were calculated.

http://dx.doi.org/10.1007/s12668-016-0232-y

Keywords

Fluvastatin, Micelles, Molecular complex, Nuclear magnetic resonance